CLAIMS

What is claimed is:

1 1.   In an application service provision apparatus having an application service

2 provision runtime library with multiple versions, a method of operation comprising:

3   receiving a request by a first update service of a first version of said

4 application service provision runtime library to upgrade an application to a second

5 later version of the runtime library; and

6   a second update service of said second later version of the runtime library

7 upgrading said application to said second later version of the runtime library.

1 2.   The method of claim 1, wherein said second later version of the runtime

2 library is a selected one of the most current version of the runtime library and a

3 predecessor version of the most current version of the runtime library.

1 3.   The method of claim 1, wherein said second later version of the runtime

2 library is a selected one of an immediate successor version of said first version of

3 the runtime library and a successor version of greater than one generation remove

4 from said first version of the runtime library.

1 4.   The method of claim 1, wherein the method further comprises

2   said first update service of said first version of said application service

3 provision runtime library notifying a dispatcher of said application service provision

4 apparatus of said upgrade request; and

5   said dispatcher notifying said second update service of said second version

6   of said application service provision runtime library of said request.

1   5.   The method of claim 4, wherein said second later version of the runtime

2   library is a successor version of greater than one generation remove from said first

3   version of the runtime library, and said method further comprises

4   said dispatcher notifying a third update service of an immediate successor

5   version of said first version of the runtime library of said request;

6   said third update service of said immediate successor version upgrading said

7   application to said immediate successor version of the first version of the runtime

8   library; and

9   said third update service of said immediate successor version notifying said

10   dispatcher of completion upon upgrading said application to said immediate

11   successor version of the first version of the runtime library.

1   6.   The method of claim 4, wherein said second later version of the runtime

2   library is greater than one generation remove from said first version of the runtime

3   library, and said method further comprises

4   said dispatcher notifying a third update service of an immediate predecessor

5   version of said second version of the runtime library of said request;

6   said third update service of said immediate predecessor version upgrading

7   said application to said immediate predecessor version of the second version of the

8   runtime library; and

9   said third update service of said immediate predecessor version notifying said

10   dispatcher of completion upon upgrading said application to said immediate

11   predecessor version of the second version of the runtime library.

1   7.   The method of claim 4, wherein said second later version of the runtime

2   library is a successor version of greater than one generation remove from said first

3   version of the runtime library, said dispatcher notifying said second update service

4   of said second version of said application service provision runtime library of said

5   request directly, and said second update service upgrading said application to said

6   second version of the runtime library.

1   8.   An apparatus comprising:

2   storage medium having stored therein programming instructions designed to

3   implement a dispatcher on the apparatus to

4   receive notification from a first upgrade service of a first version of an

5   application service provision runtime library of an application

6   requesting upgrade to a second version of the application service

7   provision runtime library, and

8   notify a second upgrade service of said second version of the application

9   service provision runtime library of said request; and

10   at least one processor coupled to the storage medium to execute the

11 programming instructions.

1   9.   The apparatus of claim 8, wherein said second later version of the runtime

2   library is a selected one of the most current version of the runtime library and a

3   predecessor version of the most current version of the runtime library.

1   10.   The apparatus of claim 8, wherein said second later version of the runtime

2   library is a selected one of an immediate successor version of said first version of

3   the runtime library, and a successor version of greater than one generation remove

4   from said first version of the runtime library.

1   11.   The apparatus of claim 8, wherein said second later version of the runtime

2   library is a successor version of greater than one generation remove from said first

3   version of the runtime library, and the dispatcher is further equipped to notify a third

4   update service of an immediate successor version of said first version of the runtime

5   library to upgrade said application to said immediate successor version of the first

6   version of the runtime library, and to receive notification from said dispatcher of

7   completion upon upgrading said application to said immediate successor version of

8   the first version of the runtime library.

1   12.   The apparatus of claim 8, wherein said second later version of the runtime

2   library is greater than one generation remove from said first version of the runtime

3   library, and the dispatcher is further equipped to notify a third update service of an

4   immediate predecessor version of said second version of the runtime library to

5   upgrade said application to said immediate predecessor version of the second

6   version of the runtime library, and to notify said dispatcher of completion upon

7   upgrading said application to said immediate predecessor version of the second

8   version of the runtime library.

1   13.   The apparatus of claim 8, wherein said second later version of the runtime

2   library is a successor version of greater than one generation remove from said first

3   version of the runtime library, said dispatcher notifying said second update service

4   of said second version of said application service provision runtime library of said

5   request directly, and said second update service upgrading said application to said

6   second version of the runtime library.

1   14. An apparatus comprising:

2   storage medium having stored therein programming instructions designed to

3   implement a first version of an application service provision runtime library, including

4   a first update service equipped with the ability to receive a request from an

5   application to upgrade the application to a second later version of the application

6   service provision runtime library, and to notify a selected one of a second update

7   service of the second later version of the application service provision runtime library

8   and a dispatcher of the apparatus of said request; and

9   at least one processor coupled to the storage medium to execute the

10   programming instructions.

1   15.The apparatus of claim 14, wherein said second later version of the runtime

2   library is a selected one of the most current version of the runtime library, and a

3   predecessor version of the most current version of the runtime library.

1   16The apparatus of claim 14, wherein said second later version of the runtime

2   library is a selected one of an immediate successor version of said first version of

3   the runtime library, and a successor version of greater than one generation remove

4   from said first version of the runtime library.

1   17.   The apparatus of claim 14, wherein said first update service is further

2   equipped to receive a notification from a selected one of a third update service of a

3   predecessor version of said first version of the runtime library and a dispatcher of

4   the apparatus, to upgrade, in response, said application to said first version of the

5   runtime library, upgrade said application to said first version of the runtime library,

6   and to notify the selected one of said third update service and said dispatcher of

7   completion of said upgrade of said application to said first version of the runtime

8   library.

1   18. The apparatus of claim 14, wherein said first update service is further equipped

2   to receive a notification from a third update service of a first predecessor version of

3   said first version of the runtime library to upgrade said application to said first

4   version of the runtime library, to upgrade, in response, said application to said first

5   version of the runtime library, and to notify a fourth update service of a successor

6   version of said first version of the runtime library to upgrade said application to said

7   successor version of the runtime library.

1   19.   An apparatus comprising:

2   storage medium having stored therein programming instructions designed to

3   implement a first version of an application service provision runtime library, including

4   a first update service to receive a notification from a selected one of a second

5   update service of a predecessor version of said first version of the runtime library

6   and a dispatcher of the apparatus to upgrade said application to said first version of

7   the runtime library, to upgrade, in response, said application to said first version of

8   the runtime library, and to notify the selected one of said second update service and

9   said dispatcher of completion of said upgrade of said application to said first version

10   of the runtime library; and

11   at least one processor coupled to the storage medium to execute the

12   programming instructions.

1 20. The apparatus of claim 19, wherein said first version of the runtime library is a
2 selected one of the most current version of the runtime library, and a predecessor
3 version of the most current version of the runtime library.

1 21. The apparatus of claim 19, wherein said first version of the runtime library is a
2 selected one of an immediate successor version of said first version of the runtime
3 library, and a successor version of greater than one generation remove from said
4 first version of the runtime library.

1 22. An apparatus comprising:
2   storage medium having stored therein programming instructions designed to
3 implement a first version of an application service provision runtime library, including
4 a first update service to receive a notification from a second update service of a first
5 predecessor version of said first version of the runtime library to upgrade said
6 application to said first version of the runtime library, to upgrade, in response, said
7 application to said first version of the runtime library, and to notify a third update
8 service of a successor version of said first version of the runtime library to upgrade
9 said application to said successor version of the runtime library; and
10   at least one processor coupled to the storage medium to execute the
11 programming instructions.

1 23. The apparatus of claim 22, wherein said first version of the runtime library is a
2 predecessor version of at least one generation earlier than the most current version
3 of the runtime library.

1   24.   The apparatus of claim 22, wherein said first version of the runtime library is

2   an immediate successor version of said predecessor version of the runtime library.

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